DOCUMENT RESUME

ED 315 577 CE 054 048

TITLE	Equivalent Credit. A Guide for Local Discussion and Implementation.
INSTITUTION	Alaska State Dept. of Education, Juneau. Div. of Adult and Vocational Education.
PUB DATE	88
NOTE	58p.
AVAILABLE FROM	Alaska Department of Education, Adult and Vocational Education, Alaska Vocational Materials Library, Box F, Juneau, AK 99811.
PUB TYPE	Guides - Non-Classroom Use (055)
EDRS PRICE	MF01/PC03 Plus Postage.
DESCRIPTORS	*Academic Education; Academic Records; *Academic Standards; *Articulation (Education); Credit Courses; *Credits; *Graduation Requirements; High Schools; Integrated Curriculum; Required Courses; *Vocational Education
IDENTIFIERS	*Alaska

ABSTRACT

This guide was developed in Alaska to help high school administrators and teachers determine why and how to grant equivalent credit graduation requirements for vocational courses. The guide is organized in four sections. The first section provides a rationale for the use of equivalent credits, explaining how they benefit students, teachers, administrators, and employers. The second section addresses some common concerns about equivalent credit, in a question-and-answer format. Some of the concerns examined include the relationship between equivalent credit and high school graduation requirements; the awarding of equivalent credit versus lowering standards; colleges and equivalent credits; polarization of the teaching staff; curriculum updating and staff development; the at-risk student; needs for additional space and staff; and recording equivalent credit on transcripts and in course descriptions. In the third section, a model process for setting up an equivalent credit system is outlined. Steps include reviewing local policies and guidelines; beginning with programs for which a strong case for equivalent credit can be built; establishing support groups; building connections between vocational and academic teachers; determining credit possibilities; disseminating information; and monitoring the process. The final section lists 20 references, and appendixes provide information on Alaskan graduation requirements and examples of the system in other areas. (KC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED315577

Equivalent Credit

A Guide for Local Discussion and Implementation

State of Alaska
Steve Cowper, Governor

ALASKA DEPARTMENT OF EDUCATION
Office of Adult and Vocational Education

William Demmert, Commissioner

Karen Ryals, Director for Vocational Education

This publication was prepared with the support of U.S. Department of Education funds under the Carl Perkins Vocational Education Act, PL 98-524. Copies are available from the Alaska Department of Education, Adult and Vocational Education, Alaska Vocational Materials Library, Box F, Juneau, Alaska 99811, (907) 465-2980. This publication may be duplicated.

CE 054048

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☒ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

K Ryals

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Alaska Department of Education 1988

BEST COPY AVAILABLE

ACKNOWLEDGMENTS

The following Anchorage School District educators participated in a 15-hour workshop on equivalent credit lead by Larry McClure, Director, Education and Work Program, Northwest Regional Educational Laboratory, during the spring of 1988. Many of their comments, concerns and ideas have been incorporated in this document.

Jack Blair	Counselor, Service High School
Mary Bristol	Social Studies, Romig Junior High School
Gerald Butts	Vocational Education Director, Anchorage School District
Judith Demers	Tourism, King Career Center
Gary Gaard	Graphic Arts, King Career Center
Shannon Harbke	Language Arts, East High School
Ruth Keitz	Executive Director of Curriculum & Instructional Services
Una Kernodle	Child Development/Parenting, Chugiak High School
Richard Krieger	Assistant Principal, King Career Center
Linda Lee	Computer Technology, King Career Center
Jane Madison	Counselor, Dimond High School
Kathy Maloney	Mathematics, Chugiak High School
Kim Mix	Child Care, King Career Center
Bob Moser	Science, Bartlett High School
Sandy Pamplin	Counselor, Bartlett High School
Jean Park	Home Economics, Service High School
Allan Phelps	Mathematics, Dimond High School
Diane Roy	Computer Technology, King Career Center
Lorna Thomas	Cosmetology, King Career Center
Flory Vinson	Project Coordinator and Technical Writer
George Walker	Principal, King Career Center
Anne Willis	Business Education, Chugiak High School

A survey of key Alaskan vocational educators and of Admission's Directors of West Coast colleges and universities was developed, conducted and analyzed by Thomas W. Straugh, Ph.D., Research Associate, Assessment and Evaluation, Anchorage School District.

The Alaska Department of Education is an equal opportunity employer and will not discriminate in Department employment, supervision, practices, services or educational programs on the basis of race, religion, color, national origin, age, sex, handicap, marital status, changes in marital status, pregnancy, parenthood, veteran's status, veteran's disability or political affiliation.

TABLE OF CONTENTS

RATIONALE 1
- Equivalent Credit Benefits Students 2
- Equivalent Credit Benefits Teachers 3
- Equivalent Credit Benefits Administrators 3
- Equivalent Credit Benefits Employers 3

COMMON CONCERNS AND QUESTIONS ABOUT EQUIVALENT CREDIT 5
- What is the relationship between equivalent credit and high school graduation requirements? 5
- Does the awarding of equivalent credit imply the watering down of local high school graduation standards? 5
- Will four-year colleges and universities accept equivalent credit as fulfillment of their admission requirements? 6
- Can't equivalent credit lead to the polarization of teaching staff? 6
- Does equivalent credit require endorsement of the vocational teacher in the applied academic area? 7
- Do vocational education programs granting equivalent credit require special scheduling? 8
- What are the implications of equivalent credit in terms of curriculum updating and professional staff development? 8
- What impact does equivalent credit have upon the general education student and at-risk youth? 8
- Does a district initiating equivalent credit need to gear up for additional space and staff in vocational programs? 8
- How do you describe equivalent credit on transcripts and in course descriptions? 9

MODEL PROCESS 11
- Review local policies and guidelines 11
- Begin with vocational programs for which a strong case for equivalent credit can be built. 11
- Establish support groups for the concept of equivalent credit. 11
- Build communication and trust between vocational and academic teachers. 12
- Determine the credit possibilities. 12
- Keep everyone informed. 12
- Monitor the process. 13

TABLE OF CONTENTS (continued)

RESOURCES 15

APPENDICES

Appendix A. Alaska State Regulations on High School Graduation Requirements

Appendix B. Graduation Requirements in Alaskan School Districts

Appendix C. Equivalent Credit Survey--Vocational Director

Appendix D. Equivalent Credit Vocational Educator Survey Results

Appendix E. Sample State Policy on Equivalent Credit--Nevada

Appendix F. Procedures for Optional Educational Experiences: Eugene Public Schools

Appendix G. Equivalent Credit Admissions Directors Survey Results

Appendix H. Sample Vocational Education Course Descriptions--Martin Luther King Career Center Between Mathematic Competencies and Instruction in Computer Technology

RATIONALE

Educational reform has been the subject of intense discussion in public, private, industrial and governmental circles throughout the United States. During the early part of this decade, educational task reports from the National Commission on Excellence in Education, the Task Force on Education for Economic Growth and the Carnegie Foundation, received headline attention for their strong criticism of American public secondary education. A common emphasis of each of their reports was upon the need to improve the high school curriculum by making the secondary school curriculum more academic.

Of the efforts to improve secondary education across the nation, the single most frequent response by the states was to increase the number of academic credits required for high school graduation. Most of these increases involved traditional subjects such as English, mathematics and science. Forty-three of the fifty states responded to the outcry for curriculum reform by increasing the number of academic credits required for high school graduation.

Local school districts have been quick to follow their state's lead. For example, in Alaska all 55 school districts meet or exceed the state requirements of 21 units of credit for graduation (Appendix A). Thirty-one of the 55 Alaskan school districts exceed the State graduation requirements (Appendix B).

This response by the states and local school districts demonstrates a strong commitment to improving the quality of public secondary education. However, by simply increasing the number of academic credits needed to graduate, differences in students' interests and abilities are ignored and students who prefer to purposefully choose a vocational program may find themselves unable to make that educational choice.

Many states and local school districts have explored the concept of equivalent credit as an alternative option to meeting increased graduation requirements.

Equivalent credit is defined as granting full or partial graduation credit for a specific subject area to an elective course. Some districts use different terminology to describe equivalent credit such as integrated credit, cross credit, substitute credit, dual credit or optional credit. All of this terminology means essentially the same thing--lining up common skills in more than one curriculum area and agreeing that one instructional context is as justifiable as another for teaching those skills.

The reason why many educators are taking a look at the concept of equivalent credit is twofold. First, educators are concerned that increased graduation requirements will result in declining enrollments and the loss of vocational programs. In 1987 Strickland and Elson questioned the state directors in all 50 states and six territories regarding this concern. Forty-seven states and four territories responded. The study found that high school enrollments are

declining in most sections of the nation, and that vocational enrollments also appear to be declining. Decreases in vocational enrollments were reported in 22 states. In four of these, the decreases occurred at the same time the total number of students enrolled in high school increased. One of these four states was Alaska. This is reason enough for a district to consider equivalent credit as an option, but the motivation to initiate equivalent credit must go beyond program survival. Many educators, both academic and vocational, see equivalent credit providing the opportunity for more flexible scheduling; adding relevancy to the curriculum; helping avoid duplication in coursework; supporting the concept of experiential learning; preparing young people for continued education and employment; and generally, helping to meet the needs of individual students.

When a group of educators gather together to investigate the concept of equivalent credit, a lively discussion on the purpose of secondary teaching and learning is usually the starting point. The issues that are uncovered during this discussion and the policies and procedures a school district puts in place can be the beginning of many positive changes.

During FY 88 the Anchorage School District received a grant from the Office of Adult and Vocational Education, Alaska State Department of Education, to research the concept of equivalent credit and develop an implementation guide for possible use throughout the State of Alaska. One of the activities accomplished as a result of that grant was a 15-hour workshop involving 20 Anchorage School District academic teachers, vocational educators, guidance counselors and administrators who met with Dr. Larry McClure, Northwest Regional Educational Laboratory, to investigate the ramifications of equivalent credit. They began their workshop by discussing the impact of equivalent credit on various groups of individuals who would be impacted. What follows are the benefits of equivalent credit they identified for students, teachers, administrators and employers.

EQUIVALENT CREDIT BENEFITS STUDENTS:

* Provides the opportunity for a student to experience the practical application of basic academic skills.

* Helps the student bridge the gap between theory and real life.

* Allows the student to have more choices of teachers and courses rather than restricting him or her to a limited number of required courses taught by a limited number of teachers.

* Encourages four-year planning and facilitates the opportunity for graduating students to gain advanced placement in articulated post-secondary vocational education programs.

* Promotes student success by offering at-risk students instruction relevant to their needs.

- Allows for alternative methods of meeting graduation requirements.

EQUIVALENT CREDIT BENEFITS TEACHERS:

- Helps teachers meet the learning needs of a diverse student body.
- Reinforces skills learned in academic courses through practical applications.
- Encourages cohesiveness of vocational and academic staff as they work together across subject areas.
- Keeps the elective program intact and reduces the number of repeat failures in required courses.
- Encourages vocational staff to keep current in their course content and instructional materials.

EQUIVALENT CREDIT BENEFITS ADMINISTRATORS:

- Provides an opportunity to design a flexible secondary curriculum to meet individual student needs.
- Emphasizes applied academics in vocational programs.
- Encourages communication between teachers and flexibility in teaching strategies.
- Avoids having to schedule extra spaces in required academic courses for students who have failed by placing them in a vocational program where there is funding support.
- Avoids cyclic emphasis of academic curriculum over the vocational curriculum and visa-versa.

EQUIVALENT CREDIT BENEFITS LOCAL EMPLOYERS:

- Produces better prepared entry-level employees who understand the relationship between theory and practice.
- Produces flexible workers who are capable of dealing with technological changes as they have already experienced integrating knowledge from different disciplines to solve a problem.
- Promotes cooperation between education and the private sector by encouraging the periodic assessment of vocational program content with regard to current practices and standards.

Another activity included in this project involved a survey of 47 key vocational educators throughout the State of Alaska regarding equivalent credit during the spring of 1988. Of the fifty-three percent of surveyed vocational directors and specialists responding, the following information pertinent to a discussion regarding equivalent credit was noted. The vocational directors and specialists reported the number of vocational education courses was either consistent or declining along with the vocational education course enrollment.

The *Nation at Risk* report and resulting national publicity and debates resulted in increased academic requirements which are reflected in changes in Alaskan school districts as well as State graduation requirements. These changes have had a tendency to restrict the degree of freedom students previously had to make course selections. Elective vocational education courses, particularly those courses which require a multi-period block rather than a single period tended to lose students.

Enrollments in vocational courses and district enrollments were judged to be stable by most respondents, however, more declines were noted in vocational education course enrollments that in total district enrollments.

Forty-four percent of the respondents reported that their districts were offering vocational education courses which either could or do qualify for equivalent credit. Recognition of equivalent credit included on transcripts of high school transfers would be granted by most of the respondents' districts. The remaining districts would honor the credits if sufficient information was provided to allow evaluation of the equivalent credit. Caution was urged regarding moving slowly and carefully in this direction. The original survey and responses are included in Appendix C and the survey results are included in Appendix D.

COMMON CONCERNS AND QUESTIONS ABOUT EQUIVALENT CREDIT

As vocational and academic teachers, counselors and administrators in your district begin their discussion, they will be seeking information on the implications of establishing a policy of equivalent credit. This section reviews some of the typical questions and concerns that might be raised.

WHAT IS THE RELATIONSHIP BETWEEN EQUIVALENT CREDIT AND HIGH SCHOOL GRADUATION REQUIREMENTS?

In the State of Alaska, a high school student must earn a minimum of 21 units: 3 in social studies; 4 in language arts, 2 in mathematics; 2 in science; 1 in health/physical education and 9 units of elective credit.

It is the responsibility of the Chief Administrator in each local school district to prepare a plan for meeting state high school graduation requirements. Local school districts may choose to exceed the State's minimum number of credits required for graduation. In the State of Alaska, 31 of the 55 school districts exceed the State's minimum graduation requirement of 21 credits (Appendix B). Currently, in the State of Alaska each school district also has the option of determining what constitutes equivalent credit and the process for awarding academic credit for completion of vocational education programs to meet graduation requirements. Once equivalent credits are assigned, these vocational education programs can be an alternative to graduation requirements as defined by local districts to meet both local and state standards. The criteria for awarding local equivalent credit should be on record so other Alaskan school districts, the Alaska Department of Education and post-secondary institutions can review and validate the integrity of the equivalent credit. Some states and local districts have developed policies and procedures on equivalent credit to support the concept and clarify intent (Appendices E and F).

DOES THE AWARDING OF EQUIVALENT CREDIT IMPLY THE WATERING DOWN OF LOCAL HIGH SCHOOL GRADUATION STANDARDS?

A shared concern of both academic and vocational education teachers is the possible dilution of academic standards in mathematics, science and English by offering students the alternative of earning equivalent credit in these required subjects via vocational education programs.

While opponents to the concept of equivalent credit argue that it is commendable to give students alternatives to fulfilling graduation requirements, it is reasonable to believe that many students will follow the path of least resistance by enrolling in vocational education courses rather than the more rigorous required academic courses.

Proponents of the concept of equivalent credit counter with the rebuttal that the awarding of equivalent credit does not equate with providing the student with an "easy way out" to fulfill graduation requirements, but rather, recognizes that students have different learning styles. They point out that a comprehensive high school curriculum should provide these students with alternative ways to gain competency in an academic subject by teaching theory along with practical applications. Such reinforcement and repetition contribute greatly to the student's understandng of academic content.

The awarding of equivalent credit in a vocational education program necessitates the identification of the academic competencies taught, an accurate analysis of the amount of time spent teaching them, and the identification of a method of measuring mastery of theory and application. Equivalent credit is usually offered as partial fulfillment of graduation requirements in an academic subject, rarely as the total number of credits. Often equivalent credit is an option only after a student has completed the first semester or year of a vocational education program.

WILL FOUR YEAR COLLEGES AND UNIVERSITIES ACCEPT EQUIVALENT CREDIT AS FULFILLMENT OF THEIR ADMISSION REQUIREMENTS?

During the spring of 1988, 15 of 20 Admissions Directors of West Coast four year colleges and universities frequently attended by Anchorage School District graduates responded to a survey regarding their policies on equivalent credit. Eighty percent of the Admissions Directors of responding institutions reported that they have become more selective. Either the institution had raised its admissions requirements or their applicants had better academic records. They recommended that the content of the vocational course be documented to include the objectives taught in the subject area in which the equivalent credit was granted. When equivalent credit was assumed to be an advanced placement course or advanced placement test results, then all respondents indicted that they would grant credit for equivalent college work. Equivalent credit for secondary vocational education courses was not nearly as well received and might be detrimental to the student applying for admission to the responding four-year colleges and universities on the West Coast. College-bound students enrolling in vocational programs offering equivalent credit for academic subjects required for admission into these colleges should be counseled accordingly. The Equivalent Credit Admissions Directors' Survey results and interpretation are included in Appendix G.

CAN'T EQUIVALENT CREDIT LEAD TO THE POLARIZATION OF TEACHING STAFF?

Some members of the academic faculty may perceive equivalent credit contributing to declining enrollment in their subject area. On the other hand, some vocational education teachers may become concerned that the emphasis on applied academics will drastically change their vocational program. Some vocational educators have expressed concerns that equivalent credit requires a

lowering of vocational program standards to serve students who are not academically prepared for the rigors of their vocational program.

To help prevent polarization of teaching staff, involvement of academic faculty in determining how equivalent credit is to be awarded is critical. Vocational teachers must be prepared to demonstrate how much time they are spending on the applied academic concepts and how they are teaching them. Often, when vocational and academic educators meet together to compare student objectives they find that many of the skill objectives for the academic courses are already being addressed in the vocational program.

Vocational educators who are concerned about finding the time to teach basic academic competencies in their vocational education curriculum may wish to review their learning activities in terms of time-on-task. A 1984 study conducted by the National Center for Research in Vocational Education revealed that secondary vocational education students spent 24% of their time off-task--time which might have been used for learning basic academic skills. This occurred most often when vocational teachers did not let students know what was expected or did not prepare them to work on their own.1

Secondary vocational instruction should emphasize applied learning rather than narrow, specific entry-level skills. Secondary students vary in learning styles, aspirations and developmental experiences and such differences should be reflected in the educational patterns available to them. This perspective argues that what is required are programs and experiences that bridge the gap between academic and vocational courses. The process of establishing equivalent credit can provide the opportunity for the academic teacher and vocational teacher to work together toward that goal. Academic and vocational education should be equally valued and schools should ensure that all students have access to both types of education through a balanced curriculum.

DOES EQUIVALENT CREDIT REQUIRE ENDORSEMENT OF THE VOCATIONAL TEACHER IN THE APPLIED ACADEMIC AREA?

Some states and districts have required that the vocational teacher be certified or endorsed in the academic area for which equivalent credit is awarded. Others have resolved the issue by providing an academic instructor as a team teacher for the vocational program. The concept of equivalent credit implies a thorough knowledge of the theory and application of the academic subject being taught on the part of the vocational teacher.

1 Halasz, Ida M. (1984) Finding time to teach basic skills. Voc Ed, 59(5), 14.

DO VOCATIONAL EDUCATION PROGRAMS GRANTING EQUIVALENT CREDIT REQUIRE SPECIAL SCHEDULING?

The school administrator responsible for scheduling must insure that the integrity of the core curriculum is maintained. By offering equivalent credit in vocational education academic subjects, the administrator can increase the flexibility of the high school master schedule. Students have the opportunity to have a greater selection of teachers appropriate to their learning style and additional sections of the academic subject are available for student placement in the master schedule.

WHAT ARE THE IMPLICATIONS OF EQUIVALENT CREDIT IN TERMS OF CURRICULUM UPDATING AND PROFESSIONAL STAFF DEVELOPMENT?

Granting equivalent credit can present a problem when there is an inadequte process for curriculum renewal or no plan for inservicing new and returning professional staff. Equivalent credit requires a process for reviewing the curriculum content of the vocational education program on a regular basis to insure that the integrity of the original agreement is maintained. Administrative monitoring can be accomplished through review of lesson plans; on-going appraisal of the teaching methodology and curriculum throughout the school year; and year-end evaluations.

WHAT IMPACT DOES EQUIVALENT CREDIT HAVE UPON THE GENERAL EDUCATION STUDENT AND AT-RISK YOUTH?

Districts which have increased their required credits in mathematics, science and language arts without offering the alternative of equivalent credit, tend to assume that only one model--exposure to more academics--will lead to academic success. There is no guarantee that by raising graduation requirements those students in the lower quartile of academic achievement will get instruction specifically designed to improve their basic skills rather than just more of the same standard coursework. Equivalent credit can provide the at-risk student a chance to break the syndrome of repeating failed academic subjects through an alternative instructional process which partially fulfills graduation requirements. Both the general student and at-risk student vary in learning styles, aspirations and developmental experiences and such differences should be reflected in the educational choices available to them.

DOES A DISTRICT INITIATING EQUIVALENT CREDIT NEED TO GEAR UP FOR ADDITIONAL SPACE AND STAFF IN VOCATIONAL PROGRAMS?

Students enrolled in vocational programs generate state and federal funds that offset additional materials or staffing if those funds are returned to the vocational programs generating them rather than being placed in a general fund. Equivalent credit does not jeopardize staffing in the academic program but can

provide the opportunity to expand academic electives by reducing failures and allowing additional options for credit rather than scheduling spaces for repeaters.

HOW DO YOU DESCRIBE EQUIVALENT CREDIT ON TRANSCRIPTS AND IN COURSE DESCRIPTIONS?

If equivalent credit in an academic subject is available to students enrolled in a vocational program, it should be included in the vocational course title and reflected on the student's official transcript. Vocational course descriptions in a district's Program of Studies should state the academic area for which equivalent credit is given, the amount of credit allowed, and any limitations on the maximum amount of credit that can be obtained by a student during a semester or school year. Sample course descriptions are included in Appendix H.

MODEL PROCESS

Recognizing that no implementation plan will be appropriate for all school districts, components of a model implementation process are present here. As the process of equivalent credit is initiated in districts throughout the State of Alaska, each process must be shaped by the unique circumstances and requirements of the local situation. The model process presented here is meant to be a general guide that offers some practical suggestions.

REVIEW LOCAL POLICIES AND GUIDELINES. If your district does not have a policy and procedures in place, a decision needs to be made regarding how visible you want the equivalent credit process to become. You may choose to make equivalent credit highly visible and invite ownership in the process by establishing a Policy Planning Committee appointed by your Superintendent to research the topic; listen to public testimony and make recommendations regarding policy and guidelines to your administration and school board. On the other hand, your district may be more comfortable taking a more informal approach which requests that the school board approve a processs involving teacher and administrative decision-making at the building level, with an annual report to the school board on the number of students taking advantage of the equivalent credit option.

BEGIN WITH VOCATIONAL PROGRAMS FOR WHICH A STRONG CASE FOR EQUIVALENT CREDIT CAN BE BUILT. The process usually begins with either a vocational or academic teacher who is interested in program improvement and who recognizes the interdisciplinary possibilities. Teachers in the Anchorage School District discovered that the decision regarding the identification of appropriate vocational programs for equivalent credit could be accomplished in a relatively short period of time (approximately 4-6 hours) by a team of the vocational teacher and the academic instructor in the subject area for which equivalent credit was sought. The team reviewed the vocational program course content by discussing the goals and objectives of the course; classroom activities and projects; looked at instructional and supplementary materials; and began the process of developing a correlation demonstrating shared competencies between the academic subject area and those taught in the vocational area. A sample matrix is included in Appendix I demonstrating the correlation between identified mathematics competencies in the Anchorage School District and the Computer Technology Program offered at the Martin Luther King Career Center.

ESTABLISH SUPPORT GROUPS FOR THE CONCEPT OF EQUIVALENT CREDIT by involving academic teachers, administrators, counselors, parents and members of the business community in the process. One way of initiating discussion is through a public forum inviting parents, students and community members to participate. Another approach could involve your Vocational Advisory Council in a review of curriculum in the vocational programs in which the equivalent credit is to be sought. Local

business leaders can help validate academic competencies needed for employment and are effective change agents in the community. Since the local Private Industry Council is responsible for youth employability competencies including academic skills, you might include a member of JTPA. If your district is considering articulation with a post-secondary institution, you may wish to involve a representative from the local college or university in your discussions.

BUILD COMMUNICATION AND TRUST BETWEEN VOCATIONAL AND ACADEMIC TEACHERS by exchanging course outlines; visiting each other's labs and classrooms and visiting local businesses whose entry-level workers are using the academically-related competencies being taught in your district's vocational programs.

The case for granting equivalent credit is stengthened considerably if the preliminary work is done by a team of instructors representing both the academic subject in which equivalent credit is sought and the vocational program. Preliminary work includes developing a matrix to determine the degree of congruence; identifying the amount of time spent teaching the academic competencies; revision of the vocational course description to reflect instruction in the applied academic subject; review of textbook and supplemental instructional materials and the development of additional lesson plans. Vocational instructors who have been through the process estimate that it takes 20 to 40 hours to review their curriculum; write or revise daily lessons; develop a detailed matrix demonstrating the correlation between the academic subject and vocational student competencies and prepare their presentation to the appropriate curriculum committee.

DETERMINE THE CREDIT POSSIBILITIES. As academic and vocational teachers work together to determine the amount of equivalent credit to be awarded, it is possible that although a vocational program might contain an impressive number of student learning objectives in the academic area, there may be several important concepts missing. If the team determines there should be some additional instructional units added to the vocational curriculum to make up for the deficit, release time or added duty addendums will be needed for the teachers to develop them.

Most school districts have awarded equivalent credit on the basis of the number of minutes spent on identified student learning objectives, either deciding that there will be a one-for-one match or assessing variable credit based on approximate time allocated to the equivalent subject. Some vocational teachers find it convenient to keep a log of the amount of time spent teaching the applied academic competencies. Each district has to determine the appropriate amount of time spent on the academic subject to qualify for equivalent credit in a vocational program.

KEEP EVERYONE INFORMED as your district works through the development of policies and procedures on equivalent credit and as it is granted for each vocational program. It is especially important to make sure the word is getting out about the equivalent credit option to secondary students and their

parents as they work with school counselors in planning their four-year program of study.

MONITOR THE PROCESS. After the policies and procedures are in place and equivalent credit has been available to students, it is important to assess how many students took advantage of this opportunity; why they chose to partially meet graduation requirements through this option and if they entered a related occupation or continued their training in a related vocational program after graduation. Vocational programs granting equivalent credit must be regularly reviewed for validity as course content is updated and new instructors are hired.

RESOURCES

Anderson, B. H. & Brovillette, M. D. (1985). The effects of increased graduation requirements for graduation on secondary enrollments in Colorado. Research report. Colorado State University. (ED 254 628)

Bell, T. H. (1984). Vocational education and the education reform movement. Vocational Education Journal, 59 (7), 33.

Carlson, J. (1984). Defining math and science competencies in vocational programs. Sno-Isle Vocational Skills Center, Everett, WN. (ED 255 684)

Copa, G. H. (1984) Insights from the past. Vocational Education Journal, 59 (7), 30-32.

Corvallis School District. (1986). Implementation guide for an integrated vocational education and math skills model. Corvallis, OR: Corvallis School District.

Corvallis School District. (1986). Inservice guide for an integrated vocational education and math skills model. Corvallis, OR: Corvallis School District.

Delaware Department of Public Instruction. (1985). Applying the academics: A task for vocational education. Dover: Delaware Department of Public Instruction. (ED 267 253)

Dyrenfurth, M. J. (1985). State trends in graduation requirements. Vocational Education Journal, 60 (1), 43-46.

Frantz, N. R., Strickland, D. C. and Elson, D. E. (1988). Is secondary vocational education at risk? Vocational Education Journal, 34-37.

Halasz, I. M. (1984). Finding time to teach basic skills. Vocational Education Journal, 59 (5), 14.

Herr, E. (1985). The unfinished agenda: the state of the nation in vocational education. Journal of Industrial Teacher Education, 23 (1), 49-58.

Kadamus, J. A. and Daggett, W. R. (1986). New directions for vocational education at the secondary level. Information Series 311. The National Center for Research in Vocational Education. The Ohio State University, Columbus, OH. (ED 272 771).

Lydecker, T. (1983). Vocational education in the comprehensive high school: an agenda for improvement. Paper presented to the annual convention of the American Vocational Association, Arlington, VA. (ED 252 666).

Magisos, J. H. (1984). Excellence in secondary vocational education. Information series 287. The National Center for Research in Vocational Education. The Ohio State University, Columbus, OH.

Naylor, M. (1986). Granting academic credit for vocational education. Overview. Clearinghouse on Adult, Career and Vocational Education. ERIC Digest #57. (ED 275 887).

Northwest Regional Educational Laboratory. (1986). Literature review on improving secondary vocational education effectiveness. Northwest Regional Educational Laboratory, Portland, OR. (Ed 267 276).

Silberman, H. F. (1988). The unfinished agenda revisited. Vocational Education Journal, 38-40.

Snow, R. C. (1983). Current trends in state's graduation policies. Integrated Education, 21 (1), 93-96.

Strickland, D. C. & Elson, D. L. (1987). Graduation requirements and vocational enrollments. Vocational Education Journal, 62 (4), 41-47.

Washington State Commission on Vocational Education. (1986). Options for equivalent credit in the high school curriculum: A guide for local decision making. Portland, OR. Northwest Regional Education Laboratory.

APPENDICES

APPENDIX A.	Alaska State Regulations on High School Graduation Requirements
APPENDIX B.	Graduation Requirements in Alaskan School Districts
APPENDIX C.	Equivalent Credit Survey--Key Alaskan Vocational Educators
APPENDIX D.	Equivalent Credit Vocational Educator Survey Results
APPENDIX E.	Sample State Policy on Equivalent Credit--Nevada
APPENDIX F.	Procedures for Optional Educational Experiences: Eugene Public Schools
APPENDIX G.	Equivalent Credit Admissions Directors Survey Results and Interpretation
APPENDIX H.	Sample Vocational Education Course Descriptions-- Martin Luther King Career Center, Anchorage School District.
APPENDIX I.	Sample Matrix Demonstrating Correlation Between Mathematic Competencies and Instruction in Computer Technology.

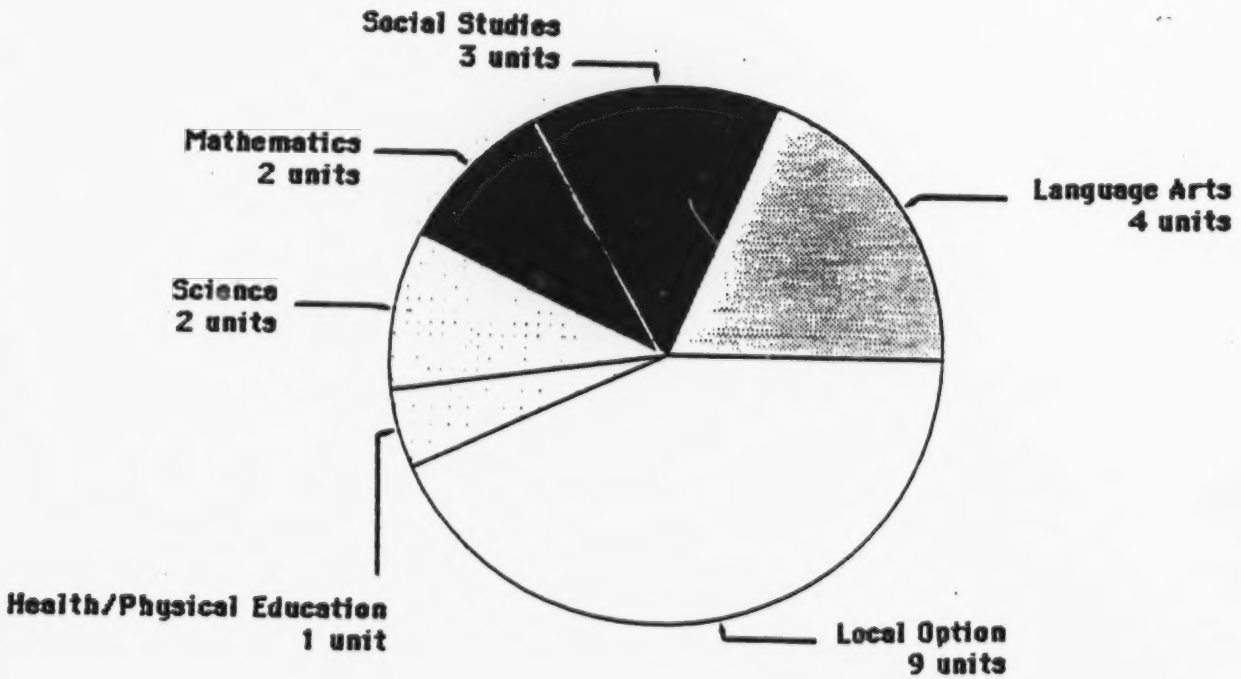
Alaska State Regulations on High School Graduation Requirements

4 AAC 06.075. High School Graduation Requirements. (a) Each chief school administrator shall develop and submit to the district board for approval a plan consisting of district high school graduation requirements. The plan must require that, before graduation, a student must have earned at least 21 units of credit.

(b) Specific subject area units-of-credit requirements must be set out in each district plan and must require that, before graduation, a student must have completed at least the following:

(1) language arts--4 units of credit;
(2) social studies--3 units of credit;
(3) mathematics--2 units of credit;
(4) science--2 units of credit;
(5) health/physical education--1 unit of credit.
(6) electives--9 units of credit

Figure 7
Alaska High School Graduation Requirements



Source: A Status Report: Curriculum, Instruction, and Assessment in Alaska School Districts 1987-88.

Source: A Status Report: Curriculum, Instruction, and Assessment in Alaska School Districts 1987-88.

	Graduation Requirements in Alaska School Districts									
	English	*Health*	*Mathematics*	*Physical Education*	*Science*	*Social Studies*	*Vocational Education*	*Fine Arts*	*Electives*	*Total Credits Required*
Kuspuk	4	.5	3	1.5	2	3	3		6	23
Lake & Peninsula	4		3	2	2	3			8	22
Lower Kuskokwim	4	.5	3	1	2.5	3.5			6.5	21
Lower Yukon	4	1	2	1	2	3			9	22
Mat-Su Borough	4	.5	2	1	2	3			8.5	21
Nenana	4	.5	2	1.5	2	3	3		5	21
Nome	4		2	2	2	3	3		6	22
North Slope (2) (3)	4	1	2	1	2	3			9	22
Northwest Arctic	4	.5	2	1.5	2	3			9	22
Pelican	4	1	3	1	3	3	.5		8.5	24
Petersburg	4	.5	2	1.5	2	3			8	21
Pribilof	4	.5	2	1	2	3			8.5	21
Railbelt	4	.5	2	1	2	3	1.5	.5	6.5	21
St. Mary's (1)	4	.5	2	1	2	3			11	22
Sand Point	4	1	2	1	2	3			9	23
Sitka	4		2	2	3	3	1		8	23
Skagway	4		2	1	2	3	1	1	8	22
Southeast Island	4	1	3	1	3	3			6	21
Southwest Region	4	.5	3	2	2	3	.5		6	21
Tanana	4	1	4	1	3	4	1		4.5	22.5
Unalaska	4	.5	2	1.5	2	3			9	22
Valdez	4	.5	2	1.5	2	3			8	21
Wrangell	4	.5	2	.5	2	3	1	1	8	22
Yakutat	4		2	1	2	3			10	22
Yukon Flats	4	.5	3	1	2.5	3	.5	1	5.5	21
Yukon/Koyukuk	4	1	3	1	3	3	1		5	21
Yupiit	4	.5	2	1	2	2			13	24.5

APPENDIX B

(1) **Electives include 4 units of Yup'ik**
(2) **Physical Education includes Health**
(3) **Student may take either Health or Physical Education.**

	Graduation Requirements in Alaska School Districts									
	English	Health	Mathematics	Physical Education	Science	Social Studies	Vocational Education	Fine Arts	Electives	Total Credits Required
Adak	4	.5	3	.5	3	3			10	24
Alaska Gateway	4	.5	2	2	2	3			8	21.5
Aleutian Region	4	1	2	1	2	3	1	1	6	21
Anchorage	4		2	1.5	2	3	.5		8	21
Annette Island	4	1	2	1	2	4	1		6	22
Bering Straits	4	1	2	2	2	3	2		5	21
Bristol Bay	4		2	2	2	3	2		7	22
Chatham	4	1	2	2	2	3		1	6	21
Chugach	4		3	1	2.5	3			8.5	22
Copper River	4	.5	2	.5	2	3.5			9.5	22
Cordova	4		2	2	2	3	1	1	10	25
Craig	4		2	2	2	3			8	21
Delta/Greely (1)	4		2	1	2	3		1	8	21
Dillingham	4	.5	2	2	2	3.5	5		5	24
Fairbanks	4		2	2	2	3			8	21
Galena	4		2.5	2	2.5	4	1.5		8.5	25
Haines	4	.5	2	1.5	2	3			11	24
Hoonah	4	1	2	1	2	3	1		7	21
Hydaburg	4	1	2	1	2	3			8	21
Iditarod	4	.5	2	1	2	3	.5		9	22
Juneau	4		2	1.5	2	3	1.5	1	6	21
Kake	4		3	3	2	3	1		4	21
Kashunamiut	4	.5	4	.5	3	4			6	23
Kenai Peninsula (1)	4		2	1	2	3	1	1	7	21
Ketchikan (2)	4		2	1	2	3			10	22
King Cove	4	.5	2	.5	2	3	2.5		6.5	22
Klawock	4		2	2	2	3	2		8	23
Kodiak Island	4	.5	2	1	2	3	1		7.5	21

APPENDIX B

(1) Fine Arts or one additional unit in physical education.
(2) Physical Education includes Health

EQUIVALENT CREDIT SURVEY
VOCATIONAL DIRECTOR

NAME: [*Names and contact information of respondents is available*
TITLE: *on request.*]
ADDRESS:

TELEPHONE:

1) DISTRICT HIGH SCHOOL ENROLLMENT? Mean=434 Median=100 Range 21-3500

2) IS THE ENROLLMENT?

INCREASING	33%
STABLE	41%
DECLINING	26%

3) NUMBER OF VOCATIONAL EDUCATION COURSES IN WHICH STUDENTS WERE ENROLLED DURING THE 1987-88 SCHOOL YEAR? Mean=16 Median=12 Range 3-60

4) COMPARED WITH THE 1983-84 SCHOOL YEAR, IS THE NUMBER OF VOCATIONAL EDUCATION COURSES?

INCREASING	26%
STABLE	33%
DECLINING	41%

5) NUMBER OF STUDENTS CURRENTLY ENROLLED IN VOCATIONAL EDUCATION COURSES? Mean=305 Median=69 Range=15-2711

6) IN COMPARISON TO THE 1983-84 SCHOOL YEAR, IS THE VOCATIONAL EDUCATION COURSE ENROLLMENT?

INCREASING	22%
STABLE	41%
DECLINING	37%

WHY? Verbatim comments:

Requirements of higher academic standards and required courses.
Other electives are being offered that interest the students more than vocational education courses. Lack of facilities and staff to offer more courses. The same students display a tendency to continue enrolling in vocational education while other students never enroll in vocational education classes.
Changes in requirements, teachers who have trouble adjusting to technology changes.
We have decreased the number of sections open to students, decrease enrollment options in the overall elective areas of our curriculum, and placed increased Pupil/Teacher Ratio mandates on all our high schools.
Instructor expertise.
Changes in scheduling.
Change in expectations of parents, school, and community. Change in requests of students. Perhaps some of vocational education is out moded. It needs to be looked at for this.
Fewer vocational education teachers and other graduation requirements.
Decreased district enrollment overall.
Less offerings available.

APPENDIX C

Student population is declining.
No fluctuation in enrollment (no community growth).
Scheduling.
School program expansion. Formerly, the curriculum was academically focused. We are trying to provide a curriculum that better serves "at risk" students and that allows students to graduate if they follow essentially "equivalent" paths/programs.
More interest in Academics and less vocational education offerings.
Population increase and vocational education emphasis.
Petersburg High School takes pride in keeping its vocational courses as up-to-date as possible. New buildings and equipment have greatly facilitated this process.
1) The construction of a new vocational/technical center building;
2) The hiring of a vocational education director and vocational education staff to administer the program.
A strong program-starts in 6th grade.
Our students have always participated in Vocational Education classes and this will not change.

7) HAS YOUR DISTRICT CHANGED GRADUATION REQUIREMENTS IN THE PAST FIVE YEARS? YES 89% NO 11%

IF YES, PLEASE DESCRIBE THOSE CHANGES.

Verbatim comments:

The graduation requirements for in-coming freshman students for the 1988-89 school year will be 24 credit hours rather than the previous 21.
More required courses, both academic (more math and science) and ANCSA, ecology, etc.
We have increased the requirements in our core subjects and also added elective courses.
Increase English credits required from 3 to 4 years.
Added 1 credit each of Social Studies and Math.
Increased English requirements.
More academics--21 instead of 19 credits.
Increased total from 19 to 22.
A) Increased the Social Studies credit requirement from two to three while decreasing the number of electives from six to five.
B) Specific courses are now required in each subject area.
Increased the number of credits to graduate to 25. Strengthened Math, Science and English requirements.
Set at 23.
We have increased the number of credits required from 20 to 22 with one of those [additional] credits in an approved math class.
Increased academics.
More credit for existing vocational education classes.
Decreased physical education requirements, increased social studies requirements.
Increased credit requirements in math and social studies, also vocational education electives available.
More core requirements.
To meet State requirements.
One elective credit to come in line with State requirement of 21 credits.

So far, our efforts have been to clarify previous requirements. We are still planning "equivalent" work study/on the job training program.
Increases in math, science and English.
Added 3 classes required for graduation.
Moved from 19 to 24 credits.
FY 86-Increased from 19-23 as a result of national push toward academics.
FY 88-Decreased to 21 to be in line with Anchorage School District and to allow greater flexibility.
Require 4 years of English now.
Alternative graduation requirements were initiated in August 1987. This consists of the college prep, the basic diploma, and the career diploma program.
Petersburg has always required four years of English and the other requirements in the new State graduation requirements.

8) DOES YOUR DISTRICT REQUIRE VOCATIONAL EDUCATION CREDITS FOR GRADUATION? YES 50% NO 50%
(If no please skip to question 9)

8A) IF YES, HOW MANY CREDITS ARE REQUIRED? Mean=2 Mode=1 Range 1-4.5
IF SPECIFIC VOCATIONAL EDUCATION COURSES ARE REQUIRED, PLEASE LIST THEM.

Basic Typing
Family/Personal Living Skills.
Vocational circuit at 8th grade.
Students may choose a minimum of 2 semesters from business education, industrial arts, or home arts areas.
Required-Introduction to Occupations
Consumer Education is required.

8 B) IF SPECIFIC VOCATIONAL EDUCATION COURSES ARE NOT REQUIRED, PLEASE DESCRIBE THE WAY THE VOCATIONAL EDUCATION GRADUATION REQUIREMENT CAN BE FULFILLED OR ATTACH YOUR GRADUATION POLICIES.

Verbatim comments:
Vocational courses are considered a practical art of which one credit is required.
Student selection fills the remaining 3 credits following completion of the required Consumer Education.
Any 3 vocational education classes of those approved in 3 year plan.
We require 6.5 credits of electives that may be all vocational education.

9) HAVE YOU OBSERVED AN INCREASE IN THE DROP OUT RATE FOR YOUR DISTRICT?
YES 31% NO 69%

COMMENT: Verbatim comments:
In the sense that a number of high school students are transferring out of district to attend schools such as Chemawa Indian School in Oregon, Mt. Edgecumbe in Alaska, etc.
This is a "best guess" as the district has not kept records on dropouts. It is my belief that frustration with the system, increased graduation requirements, increase in teen pregnancies, and the decreasing of high school electives (plus increased PTR) have been contributing factors.

We have a very low dropout rate
Vocational Education program is a "safety net" system.
Our students usually graduate from school in four years! As a fishing area, our students are not as economically deprived as others in western Alaska.
We are keeping far more than previously.
Varies by year.
School is "the only act in town."
Very low-1-3% over past six years.

10) HAS YOUR DISTRICT COMPLETED A SURVEY OF DROPOUTS DURING THE PAST THREE YEARS? YES 23% NO 77%
IF YES, PLEASE ATTACH A COPY OF THE RESULTS.

11) IS YOUR DISTRICT ADDRESSING THE ISSUE OF FAILURE RATES IN REQUIRED COURSES? YES 58% NO 38% YES/NO 4%
COMMENT:
Verbatim comments:
This is not a major problem and is handled on an individual basis through the counseling office and individual teachers as needed.
We are trying to determine the causes; excessive absences-unexcused tardies-lack of business role models-lack of home and parental support-lack of interest and motivation (no job market)- alcohol and drugs-etc.
In fact, it is reported that the Policy Review Committee is considering the issue of added required courses in Math and Foreign Language credits for graduation.
Standard results.
I am not aware of this happening yet.
Currently a major concern.
The administration works closely with the classroom teacher to present the best academic program possible.
Unknown.
By developing a complete curriculum in grades pre-12 we are preparing our students with the pre-entry skills needed to succeed in higher grades.
Failure is a personal issue in a school this small. Everyone has individual attention. You really have to work to fail.
Under study.
This is one reason we are planning "equivalent" graduation options.
Constant concern but no definitive plan district-wide.
On going examination of failure rates in required courses.
Tutorial assistance in specific instances-probable adoption of the Natural Helpers Program.
We seem to be getting more 5th year seniors. We are enrolling more students in correspondence courses if they have schedule conflicts and cannot take the courses they need.

12) IF A STUDENT WHO TRANSFERRED IN TO YOUR DISTRICT CARRIED EQUIVALENT CREDIT FOR GRADUATION REQUIREMENTS ON HIS/HER TRANSCRIPT, WOULD YOUR DISTRICT HONOR THE CREDITS? YES 85% NO 0% MAYBE 15%

COMMENT:

Verbatim comments:

We have never had this situation before, but we would probably accept the credits as shown on their transcript.
We currently provide "cross credit" in Agriculture, Consume Economics, Principles of Technology, and Business Communications.
Don't know, I think so.
Some credit would be given but would be determined on a case by case basis.
Maybe based on course descriptions. No district-wide policy.
If it was from an accredited high school.
Has not actually happened. This topic would have to be considered by the school board.
If the sending school stated on the transcript or in a letter that they accepted a vocational credit for a graduation requirement-yes. If not, no.

13) ARE THERE VOCATIONAL EDUCATION COURSES BEING TAUGHT IN YOUR DISTRICT WHICH QUALIFY FOR EQUIVALENT CREDIT? YES 44% NO 44% YES/NO 85

COMMENT:

Verbatim comments:

We offer some beginning courses in woods, boat building and welding that would transfer into a large school setting.
Fisheries Science, Vocational Math, Business Math and Business Communications.
The issue is one receiving some positive support within the district's central administration, including the Curriculum Coordinators.
Yes, but not under that heading.
Just a few where 2 or 3 hour block classes are offered.
Accounting I is accepted as a math credit towards meeting school graduation requirements.
Any ideas would be great!
Some of our courses can be applied to Language Arts credits, but at this time we don't have it in our policy.
We don't know. The State of Alaska has not defined such courses. This becomes related to special education matters and students who have very unique individualized education plans.
Not yet-one video student received English credit.

14) WOULD YOU SUPPORT THE USE OF EQUIVALENT CREDIT IN YOUR DISTRICT? YES 78% NO 22%

COMMENT:

Verbatim comments:

Equivalent credit would be supported on an individual needs basis only or as passed into district policy.
Our students are Eskimo and therefore they lack the necessary fundamentals and skills in core subjects. We believe they need the instruction in the core subjects at the present time.

I am working to that end (very slowly and conservatively).
We have started a comparable effort.
I would support it but I am not sure if the Superintendent would or the School Board.
The content would have to be as rigorous as the regular class.
It seems to be a move to lower standards. If we d=need to move this route we probably will be going back to various diplomas.
Schools have been too restrictive for too long. You can't make fish out of birds and vice-versa. Our schools should reflect our democratic nature, not the elitist approach of 100 years ago.
Not at this time.
At least not for any course we currently offer as vocational.

15) CHECK ANY OF THE FOLLOWING WHICH YOU FEEL WOULD BE HELPFUL IF INCLUDED IN A GUIDE TO EQUIVALENT CREDIT.

67% GLOSSARY OR DEFINITIONS OF TERMS
89% RATIONAL FOR USE OF EQUIVALENT CREDIT
82% SAMPLE OR DRAFT BOARD POLICY REGARDING EQUIVALENT CREDIT
85% SAMPLE OR DRAFT PROCEDURES REGARDING EQUIVALENT CREDIT
82% SAMPLE MATRIX OF COMPENTENCIES OR COURSE GOALS
74% FORM AND DIRECTIONS FOR CREATING A LOCAL MATRIX
67% DRAFT PROCEDURES FOR RECORDING EQUIVALENT CREDIT
OTHER (NAME OR DESCRIBE): Verbatim comments:

A sample matrix of competencies or course goals would be the most helpful.
The Appalachian Education Laboratory (under the old National Institute of Education supervision) created an extensive matrix of common curriculum items for their Experience-Based Career Education model.
Course outlines.
Curriculum guides for equivalent credit courses and guidance to transition.
Draft procedures for developing policy.
All would be helpful for us.
All of above.
All listed items would be helpful in a guide.

16) IF EQUIVALENT CREDIT WERE AVAILABLE IN YOUR DISTRICT TO HELP STUDENTS MEET GRADUATION REQUIREMENTS, WOULD THERE BE AN INCREASE IN VOCATIONAL EDUCATION ENROLLMENT? YES 67% NO 18% YES/NO 15%

COMMENT:
Verbatim comments:
Very doubtfull Our vocational education classes are geared more towards "hands-on" activities rather than a combination of vocational education and academics.
However, a decision would have to be add to add back vocational staff positions already eliminated over the past three years as our sections are already over-crowded for safety and educational standards.
Sure, lots of the college bound courses are ridiculous for our students.
We honor equivalent credits.
Students would take vocational education courses to get English credit.
Would remain the same.
Must be sure material is well covered.
I don't think so.
Yes, if those requirements could be met there.

APPENDIX C (cont.)

Assuming, of course, that such a program would meet State of Alaska vocational education requirements. Not all district operated vocational education courses meet or follow State mandates.
We think so.
Maybe.
Don't know the answer to this. My thinking is that since we offer 5.5 credits of electives toward the graduation requirements-and vocational education is an elective in the district that already accounts for the majority of the elective credits-there probably would be a slight increase in vocational education enrollments.
I'm sure the weaker students would opt for a different way out if they thought it were easier.

17) IF YOUR DISTRICT ALLOWS EQUIVALENT CREDIT, PLEASE ATTACH THE RELEVANT BOARD POLICY AND PROCEDURES AND ANSWER QUESTIONS 18-19. IF NOT, PLEASE SKIP TO QUESTION 20.

18) IF YOUR DISTRICT ALLOWS EQUIVALENT CREDIT UNDER CURRENT POLICIES, PLEASE LIST THE COURSES AND THE AMOUNT OF EQUIVALENT CREDIT POSSIBLE FOR EACH.

Course	Equivalent Credit Granted
Applied Math	math requirements
Accounting	math requirement
Electronics	math requirement
Vocational Math	math requirement
Business Math	math requirement
Business math	math requirements
Practical Business	math requirements
Occupational Math	math requirements
Carpentry	math requirements
Drafting	math requirements
Aviation	math and science requirements
Fisheries Science	science requirement
Fish Technology	Biology
Agricultural Science	Biological Science
Agricultural Science	science requirements
Principles of Technology	Physical Science requirement
Business Communication	English requirement
Business Communications	English elective
Vocational English	language arts requirements
Consumer Economics	Economics requirement
Being planned	

19) PLEASE DESCRIBE THE WAY THE EQUIVALENT CREDIT IS RECORDED ON THE TRANSCRIPT IF YOUR DISTRICT ALLOWS EQUIVALENT CREDIT. Verbatim comments:

As content credit.
Recorded by course title/number as listed in the Student Planner.
Prerogative of principal.
Included as all other academic credit.
Would accept credits previously approved by sending district.
Just as Science credit.
As a substitute for a requirement.

Being planned.

20) IF YOU HAVE OTHER COMMENTS YOU WOULD LIKE TO SHARE, PLEASE USE THE LINES BELOW OR ATTACH ADDITIONAL PAGES. Verbatim comments:

We try to do what is best for students on an individual basis. Before equivalent credit could be granted, the following procedure that is used for all curriculum changes would be implemented. Our Vocational Advisory Board would make a recommendation to the principal. The Curriculum Steering Committee would review the proposal. After passing this step, it would be presented to the superintendent of schools and the school board.

I am excited about the creation of a manual which should assist in "legitimating" the equivalent credit process. Our's began in one school with an informal agreement between the Principal, the Guidance Department staff, and the Vocational Agriculture instructor. It has grown to include those mentioned in this survey, however, I don't believe it has ever surfaced as a practice at the Board of Education level. In fact, most of us have assumed that it has been best to conduct the practice and not bring the Board formally into it. I know that this is unfortunate, however it is most probably accurate as to the sensitivity of the topic! For the 1988-89 school year I, with the support of our district's Vocational Advisory Council, have "brought the practice out of the closet!" If you examine the enclosed Program Planner, the description of the afore-mentioned classes which qualify for the credit equivalency contain accurate information describing the option. It will be interesting to see if this creates any backlash or conversation at the policy level. At least our students have access to accurate "consumer information" regarding some options they may have otherwise not known about!

This is great timing. I appreciate the work being done on this.

Equivalent credit is a very touchy subject. Vocational education areas to address basis in a more specific manner first. Very necessary.

Kids here learn faster/better with hands on-so equivalent credit makes lots of sense.

None at this time.

Vocational education is good. It should not be a substitute for the arts or humanities and should not track into the areas of mathematics and science to the extent that we lose the roundedness of the subject matter. To train for the application level of a skill is certainly desirable, but to limit ourselves to a facet of a broad discipline is not acceptable.

I believe that the concept of training for entry level skills at the secondary level is not appropriate. Students need all the basics. Give industry a person who has good background in liberal arts, science and math and they can train the individual for the specific type of job they wish to fill.

Give post secondary vocational institutions students with the same background and they too will train their students easier than accepting students lacking good basic skills or narrow in the scope of their basic educations.

Thank you for your help.

PLEASE RETURN THE SURVEY IN THE ENVELOPE PROVIDED.

EQUIVALENT CREDIT
VOCATIONAL EDUCATOR
SURVEY
RESULTS

INTRODUCTION

As part of the Equivalent Credit project a survey of the Alaska vocational educators was planned and completed. This document contains the survey, the verbatim results of the survey, and an interpretation of the responses. Of 47 identified vocational educators, 25 or 53% responded to the survey in time to be included in the analysis. The data are on file and are available on request.

The vocational directors and specialists reported the number of vocational education courses is consistent or declining as is the vocational education course enrollment. The "Nation at Risk" report and resulting national publicity and debates have resulted in increased academic requirements which are reflected in changes in Alaska school district as well as State graduation requirements. These changes have had a tendency to restrict the degree of freedom students previously had to make course selections. Elective vocational education courses, particularly those courses which require a multi-period block rather than a single period tend to lose students.

Vocational education courses and credits are graduation requirements for half of the responding districts. Courses identified as being required include: Basic Typing, Family/Personal Living, Introduction to Occupations and Consumer Education. Some districts do not specify course titles but require that credits be earned in vocational education courses.

Enrollments in vocational courses and district enrollments were judged to be stable by most respondents. More declines were noted in vocational education course enrollments than in total district enrollments. Put another way, more districts report increased general enrollment than increases in vocational education course enrollments. The long term implications of relative declines in vocational education course enrollments are negative if this data signals a trend.

Recognition of equivalent credit included on transcripts of high school transfers would be granted by most of the respondents' districts. The remaining districts would honor the credits if sufficient information was provided to allow evaluation of the equivalent credit. There is a need for careful documentation to insure acceptance of equivalent credit by receiving high schools as well as post-secondary institutions.

Most respondents supported the use of equivalent credit in their districts although not all felt their current vocational education classes would qualify. It appears that there is a need for a guide to development of policies and procedures to establish an equivalent credit in Alaska's school districts.

The survey included a proposed outline of such a guide or manual. All suggested topics were supported. Additional items were suggested to assist the districts.

Two issues related to enrollment declines were also included in the survey. The first, increased dropout rates and the second, use of equivalent credit to boost enrollment were correlated. Respondents reporting declines in vocational education enrollments and

increases in dropout rates tended to view equivalent credit as a method of addressing both dropout rates and vocational education enrollment declines.

Twenty-one courses were listed in response to the request for current equivalent credit use. Math requirements were the most likely to be fulfilled through equivalent credit at the present time. Perhaps the specificity of math course content facilitated efforts to provide equivalent credit.

SURVEY

The survey was developed and administered via mail in May with a follow-up in June. Copies of the survey, letters and mailing list are available on request.

RESULTS

A total of forty-seven surveys were mailed to vocational educators in Alaska high school districts. Twenty-five responses were received in time to be included in the analysis. As the data constitute more than 50% of the sample they are representative. District enrollments ranged from 21-3500 with a median of 100. The median number of vocational education courses offered by the respondents' districts was 12. The median number of vocational education students was 69. The results reflect the smaller districts as well as the districts with large comprehensive high schools.

Enrollment in the districts and enrollments in vocational education courses were reported as stable by 41% of the respondents. More reported district growth (33%) than vocational education enrollment increases(22%). Vocational education course enrollment and vocational courses were both declining in many of the respondents' districts. Reasons for declines in vocational education enrollments were provided by nearly twice as many as reasons for increases or stability. The major reason for the declines was changes in graduation requirements. The survey anticipated the effect of these changes and requested detailed information.

Nearly 90% of the respondents reported changes in graduation requirements in the past five years. Most changes reported increased the number of total credits and/or required courses/credits. Increased academic emphasis is common. One district was reported as both increasing and decreasing the number of credits though the current requirement is greater than the original. Core requirements, language arts, science, mathematics and social studies, have been identified and/or increased by most of the districts. While the academics emphasis is a positive response to the needs voiced in "A Nation at Risk" and other calls for educational reform, there is a danger of placing the high school diploma out of reach for some students. Equivalent credit may allow access for those students.

The survey requested the respondents' district dropout rates to test the danger of driving students to dropout due to increased graduation requirements. Most respondents (69%) reported no increase. That more than 30% have increased dropout rates is of concern for Alaska. Vocational education is viewed as the "safety net" for students in many districts. Equivalent credit could strengthen the net by providing more alternatives to marginal students.

Respondents were asked if vocational education credits were part of their district's graduation requirements. Half of the respondents indicated one or more credits were required in the vocational education area. The median was one credit with the range being from 1-4.5 credits. Specific high school vocational education courses were

required in three districts. The required courses included: Basic Typing, Family/Personal Living Skills, and Introduction to Occupations.

As most districts had reported no increase in dropout rates, it was not surprizing that most (77%) had not completed a dropout survey in the past three years. Of more concern was the issue of failure in required courses. Most (58%) reported district efforts to address the issue. Equivalent credit and "equivalent" graduation were of direct interest to help address failure in required courses. There appears to be an opportunity for vocational educators to be pro-active with equivalent credit policies and procedures which would allow students to fulfill graduation requirements with experiential education.

Equivalent credit would be accepted by most districts (85%) without question. The remainder (15%) would evaluate the transcript and supporting information prior to granting credit. Well documented use of equivalent credit would be accepted in all responding districts. A need was expressed by respondents for an equivalent credit model or guide.

Further, the responding vocational directors tend (78%) to support the use of equivalent credit in their own districts. Caution was urged in the survey comments with regard to moving slowly and carefully in this direction. The integrity and rigor of the curriculum must be protected. Many (44%) reported that their districts were offering vocational education courses which either could or do qualify for equivalent credit. In fact, equivalent credit is being used as a option already in districts, particularly in "block" classes.

A list of courses currently offering equivalent credit was gathered as part of the survey. See the attached results with verbatim comments (Item 18 applies) for the complete list. Most courses allow equivalent credit in mathematics. Science, language arts and economics graduation requirements could be fulfilled through equivalent credit in use at the time of the survey. Many respondents reported that the granting ofequivalent credit was on a case-by-case basis and not a formal of district policy or procedure.

Survey comments expressed both optimism for the equivalent credit and concern that the curriculum might be 'watered down'. The use of equivalent credit may be more prevalent than is advertised, certainly more often used than is reflected in district policy. It appears that healthy discussion and hard work face the districts about to codify practice. Board debate as well is to be anticipated. The developed guide must address philosophy as well as describe the methods to begin use of equivalent credit.

Alaska's districts stand poised to move toward recognized use of equivalent credit. Adequate preparation and documentation can allow districts to maintain comprehensive curricula which respond to the learning styles, abilities and needs of all students.

ALTERNATIVE METHODS OF EARNING CREDIT

State of Nevada

I. In Occupational Education:

A board of trustees may allow a pupil to earn towards the units necessary for graduation from high school, two units of credit required in English, one unit in mathematics and one unit in science in the following occupational courses of study:

(a) Agriculture.
(b) Business.
(c) Occupational education in cooperation with a private employee.
(d) Health Occupations.
(e) Occupations in trade and industry.
(f) Home economics.
(g) Home economics related occupations.
(h) Industrial arts.
(i) Marketing.
(j) Pre-occupational employment skills.

The local superintendent of schools shall appoint a committee composed of at least one person certified to teach in the occupational course of study and one person certified to teach in the academic area in which the credit may be earned. The committee must verify to the board of trustees that the curriculum for the occupational course of study includes the curriculum of the required course of study.

After verification has been received from the local board of trustees, the written curriculum and title(s) of the course(s) of study and a statement of the academic credit to be granted must be submitted to the State Board of Education for approval. Academic credit may be granted for the occupational course of study or combination of courses only after the State Board of Education has given its approval.

A student who earns academic credit pursuant to this section must be notified that the approval for academic credit is designed to meet graduation requirements from high school and may not be accepted for academic credit by a specific postsecondary institution. A copy of the notification given to the pupil must accompany other materials to be submitted to the State Board of Education for final approval.
A minimum number of academic credits must be earned in the respective academic areas, as follows:

(a) At least one credit must be earned in the academic mathematics department;
(b) At least one credit must be earned in the academic science department; and
(c) At least two credits must be earned in the academic English department.

APPENDIX E

BEST COPY AVAILABLE

4435 Competencies

Rev. January 1986

In accordance with state mandate, students of School District 4J must meet a minimum level of academic competence before graduation from high school. The district administers written and standardized tests that measure the following competencies:

Capitalization and Punctuation
Listen and Recall
Mathematics
Reading
Reasoning
Reference Skills
Speaking
Spelling
Writing

4440 Procedures for Optional Education Experiences (Graduation Credit)

Students are encouraged to formulate and pursue a program of studies that will provide them with the fundamentals generally needed by members of the adult society, as well as those skills, knowledges, and understandings needed for the individual to pursue his or her special area(s) of vocational and avocational interest.

School District 4J recognizes its responsibility to assure the student maximum guidance in educational, physical, and psychological growth; however, the district also recognizes its limitations in ability to formally offer education experiences which meet every student's special needs and learning styles. When a student's special education needs are not satisfactorily met within the formal school structure, optional education experiences may be negotiated betven the student, parent, and school. Paramount in considering optional education experiences for a student should be the value of the optional education experiences compared to experiences available within the formal structure of the district. (Note: Optional education experiences do not alter minimum reuirements for graduation. Attendance, units of credit, and basic district competencies as designated in board policy must be met.)

When a need to identify an optional school experience has been agreed upon by the student, parents, and staff, semester hours of credit may be granted for an approved experience if the following general and specific requirements are met.

4440.1 General Guidelines

Rev. January 1986

The following guidelines must be satisfied by all optional experiences:

-more-

4000 INSTRUCTION

4400 GRADUATION REQUIREMENTS

4440 Procedures for Optional Education Experiences (Graduation Credit)

1. The experience must meet or exceed the minimum definition for semester hours of credit as defined in State Minimum Standard 22-102 (1980).

2. The same experience is not available within the existing school structure, or there are extenuating circumstances substantially supporting enrollment in the optional experience.

3. An identified need, goal, or process of the individual student can be be met by the designated optional experience.

4. The goals and objectives of the optional education experience must be validated by the supervising teacher's verification of specific criteria expressed through written and/or observable behavior.

5. Optional education experiences receiving credit are of an academic skill or performance level equivalent or above that given credit within the credit granting school's curriculum.

6. The school accepting the education experience established the number of hours granted for successful completion.

7. A planned course statement (State Minimum Standard 22-316 and 4J board policy statement 7135) has been filed with and accepted by the school granting credit. (University course descriptions may be accepted in lieu of the planned course statement.)

8. Verification of compliance to agreements of the optional experience is made by the credit granting institution's principal or his or her designee.

9. The process for optional education experience identification and acceptance is completed prior to the student beginning the experience.

10. A maximum of 30 of the 230 hours required for a standard high school diploma can be completed through independent study or off campus experience.

11. A request to raise the limit above 30 shall be considered on an individual basis.

APPENDIX F (cont.)

4440 Procedures for Optional Education Experiences (Graduation Credit)

dependent on staff-student agreements. However, students shall receive needed guidance in planning, implementing, and evaluating accepted educational experiences.

Independent study is open to any student displaying the attitude, motivation, and need for accomplishing self-initiated, self-directed study. Identified education activity can be part of, in lieu of, or an extension of required and/or elective curricula.

For credit to be received for independent study, each of the requirements included in the general guidelines shall be met and, additionally, the following are required:

1. Initiation, design, and implementation of the proposed education experience shall be the responsibility of the study. (Sample forms are available in the individual buildings.)

2. Proposed goals, content, processes, and evaluation procedures must be approved by the involved student counselor (optional) and subject matter, plus the discipline department chairperson and the curriculum principal issuing credit.

3. The terms of the proposed experience shall follow the planned course statement outline. Additionally, the following information shall be included:

   a. student's name
   b. student's grade level
   c. date of approval
   d. inclusive dates of proposed education experience
   e. number of semester hours of credit to be granted to successful completion of proposed experience
   f. signature of requesting student
   g. signature of parent or guardian
   h. signature of sponsoring teacher
   i. signature of department chairperson and curriculum assistant principal verifying issuance of credit
   j. signature of coordinating counselor

Obtaining signatures described in items f, g, and h shall be the responsibility of the requesting student. The sponsoring faculty member shall be responsible for processing the request through the parties described in items i and j.

-more-

4440 Procedures for Optional Education Experiences (Graduation Credit)

4440.2 Process for Appeal

To facilitate student appeal of an unsuccessful request for an optional education experience, the following process shall be established:

1. Each secondary school shall have an appeal committee composed of a minimum of three members designated by the principal. At least one committee member shall be from the department requested to verify the optional experience. Agreement by two-thirds of the appeal committee shall constitute a decision.

2. The school's appeal committee's decision can be challenged through a written request to the Director of Secondary Education for a hearing. A decision rendered by the director shall be final, unless the student wishes to appeal the case to the board.

3. The initiation of any appeal procedure shall be the responsibility of the student.

4440.3 Specific Guidelines Rev. January 1986

Optional education experiences are of three types: (1) Independent Study, (2) Challenge Exams to Waive Requirements, and (3) Off Campus Experiences.

4440.31 Independent Study

Independent study is a process which emphasizes the individual's role and responsibility in the identification of education goals, objectives, learning processes, and the needed facilities, materials, services, and time required to complete individual study. It is a learning situation which encourages individual educational growth but provides personal interaction when needed. It is characterized by increased independent in educational activity on the part of the student.

Independent study may be of two types: (a) scheduled independent study courses within the building, or (b) special contract independent study which may occur away from the building. The type of study shall be

-more-

APPENDIX F (cont.)

4440 Procedures for Optional Education Experiences (Graduation Credit)

Receiving the above signatures shall constitute a contract between the school and student. Upon appropriate faculty verification of satisfactory completion of the accepted terms, the student shall be granted the agreed-upon semester hours of credit. The student may demonstrate his or her proficiency with a written or oral examination, completion of a project, presentation of a paper, or other agreed-upon method(s) of evaluation. Semester hours of credit earned through independent study may be applied toward required discipline area, role area, elective, and total hours. The record of transcript shall include verified experiences in independent study.

4440.32 Challenge Examinations Rev. January 1986

Challenge examinations provide a process by which students can waive a requirements by demonstrating proficiency in a subject without enrolling in a specific course.

The examinations must test the attainment of the course goals and objectives; the format may include, but is not limited to, paper and pencil tests, oral recitations, and physical demonstrations. Challenge exams may be used to waive a requirement but credit shall not be granted.

Guidelines for challenge examinations shall include those stipulated in the "General Guidelines" plus the following:

1. The district shall designate courses available for challenge and construct district-wide examinations. Learning packets will be developed to assist students in preparation of the exams.

2. A student may take a challenge examination to waive a specific course requirement not more than once during an academic year.

3. The challenge exams shall be graded with a pass/no pass notation.

4000 INSTRUCTION

4400 GRADUATION REQUIREMENTS

4440 Procedures for Optional Education Experiences (Graduation Credit)

Rev. January 1986

4440.33 Procedures for Challenge Examinations

1. The student obtains a request form from the the counselor and submits the complete form that

2. The assistant principal authorizes the administration of the test and identifies appropriate staff members to administer the examination. The test must be evaluated by at least three professional staff members.

4440.34 Off Campus Experiences Rev. November 1986

Off campus experiences at accredited post-secondary institutions of learning and other accredited and district recognized institutions or organizations involve learning experiences in which the majority of learning is supervised by non-district employees. The experience should be related integrally to an individual's program plan and the school curriculum; in addition, it should be described in a written agreement involving parents, the school, the student, and the outside agency.

Rationale

The community should be recognized as an extension of the classroom. Involvement in the ongoing activities of diverse business enterprises, community agencies, and other government and private organizations can provide valuable educational experiences for students. Schools should increasingly use resources in designing educational programs that are consistent with board policy and that are appropriate to diverse student needs, interests, and abilities.

Implementation

1. Enrollment in courses of other educational institutions. (Simultaneous enrollment in the University of Oregon or Lane Community College academic, vocational, adult education or high school completion.)

-more-

4440 Procedures for Optional Education Experiences (Graduation Credit)

2. Training internships with community agencies or work-training programs in business enterprises (with or without high school class).

3. Participation in training or performance groups such as museums, sports, and recreation training, gymnastic academies, etc.

4. International and domestic exchange, or other unique enrichment experiences.

5. Planned travel.

Guidelines for Off Campus Experiences

In order for credit to be awarded successfully, off campus experiences, the guidelines stipulated in "General Guidelines," and the following specific guidelines shall be met:

1. The experience shall be consistent with and related to the student's education goals, objectives, abilities, and interests.

2. Off campus experiences shall be equivalent to the same standards of quality as classroom experiences.

3. The student's activities shall be supervised by a designated person in the participating agency.

4. Work training programs may be either paid and/or unpaid, according to the arrangement of the activity.

5. Credit may be granted upon satisfactory completion of the terms of the student's written agreement as accepted by the school district and the accredited institution. Agreements to attend these institutions shall conform to the accepted guidelines for off campus experiences.

6. The outside experiences may occur at any time during the student's secondary school career (grades 9-12), depending upon the same considerations affecting admission of students to other courses of the school, such as the student's interests, abilities, maturity, goals, objectives.

4000 INSTRUCTION

4400 GRADUATION REQUIREMENTS

4440 Procedures for Optional Education Experiences (Graduation Credit)

Enrollment

1. The interested student will be responsible for developing and negotiating a tentative proposal for an off campus credit program in relation to a specific setting. In developing the proposal, the student will indicate the proposed location of off campus experience, the types of activities in which he or she will engage, the expected learning outcomes and how they relate to her or his educational goals and objectives, the tentative schedule for such activities, and other factors which are relevant to the experience. Criteria outlined in the planned course statement shall be met.

2. The proposal shall be revieved and the student counseled by a designated faculty member in the department most directly related to the type of activity proposed. The student's counselor or program adviser may be included in the counseling (optional). When signatures of support have been received from the department, program adviser (optional), student and parent, it shall receive tentative approval. (The principal may wish to appoint an appropriate committee to review an off campus proposals.)

3. The student shall present the proposal to the off campus agency, arrange any modifications, if necessary, in the proposal and obtain written approval by the person in that agency designated to be his or her adviser.

4. Acceptance of proposed experiences shall be based upon (1) data on students as provided by teachers, counselors, parents, and the student, (2) identified student needs, abilities, past performances and aspirations, and (3) the probability that the designated education experience will meet identified student goals and objectives. When the proposal is approved by the parent, off campus agency, program adviser, and school (department representative or school committee), a copy shall be filed in the office of the principal or designee and copies sent to all parties to the written agreement.

-more-

4000 INSTRUCTION

4400 GRADUATION REQUIREMENTS

4440 Procedures for Optional Education Experiences (Graduation Credit) Rev. Nov. 1986

Experience Validation

The off campus agency shall evaluate the student's progress and verify his or her termination or completion of the written agreement. Such verification and evaluation shall be revieved, grade and credit determined, and filed in the student's record of transcript.

Granting of Credit Rev. Jan. 1987

Credit may be granted for required discipline areas or elective units subject to prior agreement. It is essential that required competencies be considered during the planning stage of the off campus experience.

Starting with the class of 1989, the following will apply:

Credit for learning experiences conducted outside the high school classroom will normally be limited to independent study and off-campus experiences. Up to thirty (30) credit hours may be earned for optional education experiences. Requests for more than thirty (30) credit hours should be directed to the principal for approval. If the student's application is denied, an appeal may be submitted to the Director of Secondary Education.

The criteria identified in the Administrative Handbook for Optional Education Experiences shall be followed.

Transportation Needs

Students shall be responsible for their own transportation to and from off campus learning settings.

SAIF Insurance Coverage (for off campus work experience)

SAIF coverage shall be provided by the district pursuant to ORS 656.033 if the following three conditions are met by the off campus activity:

-more-

4440 Procedures for Optional Education Experiences (Graduation Credit)

1. The duties performed by the student at the time of injury are:

   a. among those required of similar full-time employees, and

   b. described on the district's application for coverage.

2. The student earns no wage. (If wages are earned, Workers' Compensation coverage is the responsibility of the participating agency, assuming the Workers' Compensation Act is otherwise applicable.)

3. The student's name and a description of his or her duties have been sent to SAIF. The principal or designee shall be responsible for filing the necessary form at least five (5) days prior to the beginning of the student's participation.

Programs Insured by SAIF

Students in the following programs are insured by SAIF:

1. House building project.
2. Nursing home and hospital work programs.
3. Forestry students (no pay).
4. Students working in private or church kindergartens.
5. Students working in local business firms or community centers for no pay.
6. Special education students who are on a work experience site.

Activities Not Covered by SAIF

1. Students working as aides in own district schools.
2. Students involved in observation only.

4000 INSTRUCTION

4400 GRADUATION REQUIREMENTS

4440 Procedures for Optional Education Experiences (Graduation Credit)

Rev. January 1986

4440.35 Credit for Classes Taken at Lane Community College or the University.

1. Lane Community College Credit

Three term hours of credit will be granted for successful completion of each 36 hour high school completion class.

a. The student shall be 16 years of age to be eligible for the high school completion class option. Special arrangements may be negotiated with LCC.

b. Credit shall normally be granted only to a student who has been unsuccessful in the equivalent course in the regular high school program.

c. A maximum of three credits may be earned through the high school completion program.

✓ 2. Non-College Transfer Courses

1 LCC credit = 1 high school credit hour, or
15 LCC clock hours of instruction = 1 high school credit hour

3. University Credit

9 credit hours = 10 high school credit hours

NOTE: 1 Carnegie Unit = 10 credit hours = 130 clock hours in a planned course of study.

- more -

EQUIVALENT CREDIT
ADMISSIONS DIRECTORS SURVEY
RESULTS AND INTERPRETATION

INTRODUCTION

As part of a project to develop a handbook for Alaska school districts to use to develop policies and procedures to allow students to earn equivalent credit, a survey of 20 Western institutions of higher learning Admissions Directors was planned and completed. Surveys were mailed to schools frequently mentioned in Anchorage School District surveys of recent graduates (Anchorage School District Follow-up Survey of 1982-83 Graduates).. The survey was designed to obtain information regarding admissions standards, changes in admission standards, and the current use of equivalent credit by students applying for admission. Assertive survey and follow up procedures resulted in a representative sample of the Admissions Director's opinions being obtained. Results were tallied and are attached.

It appears that the issue of equivalent credit must be approached with the utmost professionalism to avoid penalizing the students served by the school districts of Alaska. The decision to grant equivalent credit to satisfy graduation requirements must be made with full deliberation. Content of the vocational course must be documented to include the objectives taught in the academic area in which the equivalent credit will be granted. Admissions standards are either rising or are about to rise in 80% of the institutions which responded. Admissions officers report that they have become more selective or their applicants have better records (both higher GPAs and stronger academic preparation) so that the admissions standards are higher due to more competitive students. When equivalent credit was assumed to be Advanced Placement course or Advanced Placement test results then all responding institutions would grant credit for equivalent college work. Equivalent credit for high school vocational education courses was not nearly as well received and could be detrimental for the student applying for admission to the surveyed institutions.

SURVEY

Through use of an assertive introductory letter and aggressive follow-up, 15 of the 20 or 75% of the contacted institutions returned completed surveys. A copy of the original letter, the follow up letter and the survey are attached as appendix 1. Surveys were sent to the following institutions:

University of Alaska Anchorage,
University of Alaska Fairbanks,
Arizona State University,
University of Colorado,
University of Oregon,
Oregon State University,
Washington State University,
University of Washington,
Pacific Lutheran University,
University of California,
Stanford University,
University of California at Davis,
California State University,
Willamette University,

APPENDIX G

Idaho State University,
University of Idaho,
Montana State University,
University of Montana,
Western Montana College, and
Brigham Young University

Actual responses have been filed and are available for inspection.

RESULTS

The Admissions Directors reported that their enrollment of graduates of high schools in Alaska ranged from a low of 7 to 13,500 with most at 250 and below. The enrollment of Alaskan graduates is either stable or increasing in 93% of the respondents' institutions. There is an interest in the academic preparation of the Alaska high school graduate.

Admission requirements have changed or are planned for 80% of the respondents' institutions. Most, 80%, have either increased the qualification threshold or have had more competitive students apply which has had the same effect. Nine of the respondents mentioned increased "core" course requirements which tended to include four years of language arts (Literature and Composition were recommended.), three years of math (Algebra I and II, Geometry, and Analysis/Pre-Calculus were recommended.), two years of Laboratory Science (Biology, Physics and Chemistry were recommended.) and three years of Social Science (U. S. History, Government/Civics and World History were recommended.). In addition the "core" included "college prep" electives like Advanced Placement courses and foreign languages. Increased GPA and class standing as well as higher test scores were also becoming part of the admissions process. In other words, the "competitive" student will be expected to be well prepared in the four "core" areas. Deviations from the standard "college prep" high school curricula can be covered by excellent performance in the testing arena but the initial transcript evaluation may disqualify students if the expected courses are not found.

The acceptability of equivalent credit was directly posed in the survey. The Admissions Directors responding ranged in opinion from the statement that:
"Vocational/occupational math is not an equivalent for algebra, geometry or pre-calculus" to "We accept what is written on the transcript" to "We use the high school transcript to verify graduation and compute GPA." It appears that the high school will continue to be expected to record credits with integrity and professionalism.

Should questions arise regarding a student's transcript five of eleven comments indicate the school would be contacted for further information. One institution asks that the high school staff complete the transcript evaluation for applying students. The remaining six make the decisions regarding questioned credits in-house either in the Admissions Office or in conjunction with academic department personnel. There is a need, in other words, to make the recording of credits as clear and straight forward as possible to avoid doing a disservice to the graduates of Alaska's high schools.

As a final comment one Admissions Director responded that "This a complicated area that I hope is not encouraged. When we specify 4 years of English we are looking for 4 years of literature or composition, not business form letters but solid college preparatory course work." On the other hand, the goal of a student may be a high school diploma which may be the terminal degree. Use of equivalent credit to allow a student to gain the

benefits of a comprehensive vocational education while fulfilling the graduation requirements appears relevant.

It appears there is a need for careful guidance with regard to granting equivalent credit to insure that post-secondary educational opportunities are not limited for Alaska's high school graduates. Careful planning and attention to detail can result in meeting the students' needs now and in the future. The manual to be produced by the State Department of Education will have a positive effect if followed. Districts planning to grant equivalent credit for vocational courses must document the content correlation between the vocational course and the academic course. Evidence that the student learning objectives, the time spent on teaching academic skills and the student learning objective attainments are equivalent must be irrefutable before equivalent credit is granted.

EQUIVALENT CREDIT SURVEY
ADMISSIONS DIRECTOR

APPROXIMATE ALASKAN STUDENT ENROLLMENT? Range 7-13,500 most 250 and below

IS THE ALASKAN STUDENT ENROLLMENT

INCREASING?	33%
STABLE?	60%
DECLINING?	7%

HAS YOUR INSTITUTION CHANGED ADMISSION REQUIREMENTS IN THE PAST FIVE YEARS?
YES 73% NO 20 % changes planned 7%

IF YES, PLEASE DESCRIBE CHANGES AND COMMENT:

Verbatim comments:

More rigorous application of high school requirements, especially in Arts and Sciences.

We have gone from basically an open admissions system to one that requires high school graduates to have completed a minimum number of credits in core academic subjects-beginning fall, 1989.

Higher SAT and GPA requirements but no course requirement changes.

Old: 2.5 GPA or top 50% of class or 23 ACT or 1010 SAT. New (effective Fall 1988) 3.0 GPA or top 25% of class or 23 ACT or 1010 SAT. Also, now must demonstrate competency in 4 subject areas: English, Math, Lab Science, and Social Science. (There is a difference in requirements for residents and non-residents.)

High school core 1988/ admission priority number.

We have merged a community college and university systems to form an open admissions system with a formal or traditional admittance to 2,, 4 or graduate degree programs.

New admission requirements may go into effect fall quarter 1990. This will be decided in the next month by the Board of Regents.

Require two years of one foreign language, two years of college preparatory mathematics.

New admission standards will be established by 1990.

Beginning in 1991 we will require a core curriculum of 16 academic units including 4 credits in English, 3 in Mathematics-including Algebra II, Geometry and Trigonometry, 3 in Social Sciences and 3 in Natural or Physical Sciences, including 1 laboratory course in Biology, Chemistry or Physics. We strongly recommend two years of a non-English language.

Beginning in 1989 we will require either the ACT or SAT for admission.

Moved from a predictive success formula to a preparation in high school index.

Raised GPA and implemented high school college preparatory subject pattern requirement as follows: 4 years of English-literature and composition, 3 years of Mathematics-algebra, geometry, algebra II, trigonometry, analytical geometry, finite mathematics, advanced applications calculus, probability and statistics, etc. 2 years of Science-biology, chemistry, physics or earth and physical science- one year as a laboratory science. 3 years of Social Studies and 2 other college preparatory courses-foreign language, computer science, fine and performing arts or other college preparatory electives, including advanced-level vocational-technical courses.

Addition of course requirements for entering freshmen: 4 years of English, 3 years of Mathematics, 3 years of Social Studies, 2 years of Science, 2 years of other college prep course.

HAVE YOU BECOME MORE SELECTIVE?

YES 8.0% NO 2.0% May become more selective 7%

IF YES, PLEASE DESCRIBE CHANGES AND COMMENT:

Verbatim comments:

Acceptance rate lower for out-of-state from around 66% to around 54%.
SAT, ACT, class rank of accepted students continue to rise.
Due to raising academic requirements.
Lowered the admission priority numbers.
Increase in quantity and quality of applicants.
New admission requirements may go into effect fall quarter 1990. This will be decided in the next month by the Board of Regents.
More applicants and better qualified which results in more stringent application of entrance requirements.
Grades and test score requirements are higher.
Our minimum GPA has been raised to a 2.5 from 2.0 beginning in 1991.
Our requirements have been increased.
We look at basic high school college preparatory and "AP" classes plus ACT scores.
Course requirements have increased the overall background preparation of new freshmen since implementation for Fall, 1985.

IF A STUDENT WHO APPLIED TO YOUR INSTITUTION CARRIED EQUIVALENT CREDIT ON HIS/HER TRANSCRIPT, WOULD YOUR INSTITUTION HONOR THE CREDITS?

YES 33% NO 33% Maybe 33%

IF YES, PLEASE DESCRIBE CHANGES AND COMMENT:

Verbatim comments:

Vocational/occupational math, for example, is not considered to be an equivalent for algebra, geometry, pre-calculus. No substitute for foreign language, etc.
We do accept Advanced Placement credit if the student scores at the required levels for departmental acceptance. However, we would not use them to satisfy competency requirements.
We count credit as indicated on the transcript.
We use the high school transcript for GPA purposes only and verification of graduation.
Our current admission requirements are upper half of graduation class (GPA). No course "pattern" required at this point in time. This may change with the new admission requirements in 1990.
No, but decision regarding applicant would depend on the pattern of all classes taken. If equivalency credit is minimal and there is evidence of a strong college preparatory program acceptance is likely.
Duplicate credit would not be allowed. If credit was recorded in a required area we would not know otherwise. If we knew it, it probably would not be allowed.
If the credits can be shown as college level, such as advance placement, credit may be granted upon department approval.
Only in the case of dual enrollment where a college or university would also issue a transcript for the work. We allow credit for AP courses also.
Committee review in Admissions first then to department if needed.

Depends. Will transcript carry a CLEAR description and notation of credit?
The form we use for verification of the required high school subjects is completed by a counselor or administrator at the high school.

HOW DO YOU "PROCESS" AN APPLICATION WITH A QUESTION ABOUT A COURSE? FOR EXAMPLE, DO YOU REFER TO RELEVANT DEPARTMENT CHAIR FOR RECOMMENDATION OR DECISION?
COMMENT:

Verbatim comments:

Call high school for guidance counselors help. Would appreciate inclusion of high school profile that tells us about curriculum, graduation requirements, etc.
Our departments make the ground level decisions as to whether alternate courses or special testing may be used to grant academic credit in their departments.
Office of Admissions staff usually respond but occasionally specific faculty members are asked to determine the credit granted for unusual courses/situations.
No, decision is generally made by the Associate Director of Undergraduate Admissions.
All exceptions are referred to the Associate Dean of Admissions.
We would contact the high school.
We would contact the high school for a description of course content. The department chair would become involved.
A transcript evaluator will review the credit and refer problems to the department chair.
We might contact the secondary school if there is a question. A profile or piece of paper accompanying the transcript is helpful.
If in doubt, we would ask issuing school for more information.
Admissions office has full responsibility since the undergraduate admissions requirements are mandated by the Board of Higher Education.

IF YOU HAVE OTHER COMMENTS YOU WOULD LIKE TO SHARE, PLEASE USE THE SPACE BELOW.

Verbatim comments:

Keep up the good work.
As soon as the new admission requirements are decided information will be sent to appropriate high schools.
This is a complicated area that I hope is not encouraged. When we specify 4 years of English we are looking for 4 years of literature or composition, not business form letters etc ,but solid college preparatory course work. In math we want an algebra course, geometry, math analysis, etc., not some credits from a machinists course. Students are already unprepared in these areas and it will not help to have credit transferred from a non-college prep course listed as meeting these requirements.

8845 GRAPHIC ARTS II

Grade Level 11-12. Two semesters. *Prerequisite: Successful completion of Graphic Arts I.* Advanced study of Graphic Arts including opportunity to work with Graphic Arts in actual production. Course design includes advanced offset press work, process camera, and applied design.

Construction

8415 CARPENTRY I

Grade Level 10-12. Two semesters. *Prerequisite: Wood Lab 1.* In this course experience is gained in safe and proper use of hand and power tools. Students will study foundation work, hand tools, power tools and blueprint reading.

Alternative credits: ½ Math/semester (1 credit maximum).

8416 CARPENTRY II

Grade Level 11-12. Two semesters. *Prerequisite: Successful completion of Carpentry I.* Experience gained in stair construction, insulation, roofing, interior finish, and cabinet construction. Advanced skills and knowledge including layout, applied math related to materials acquisition, building codes and basic surveying.

Alternative credits: None.

8430 CONSTRUCTION ELECTRICITY I

Grade Level 10-12. Two semesters. *Prerequisite: None.* The areas covered in this course include electrical theory, installation and maintenance of circuits, safety, tools, switching circuits, non-metallic sheathed cable, blueprint reading, National Electrical Code. Electrical work on building projects include layout, installation and testing of electrical equipment.

Alternative credits: ½ Math/semester (1 credit maximum).

8431 CONSTRUCTION ELECTRICITY II

Grade Level 11-12. Two semesters. *Prerequisite: Construction Electricity I.* The areas covered in this course include: electrical theory, blueprint reading, National Electrical Code, conduit, motor control, trouble-shooting, installation and maintenance. Electrical work on building projects including layout, installation and testing of electrical equipment are covered.

8440 MASONRY 1

Grade Level 10-12. One semester. *Prerequisite: None.* This course consists of learning footing form construction including use of hand tools, reading simple blueprints and layouts and using transit and level. The student is introduced to concrete mixing procedures, finishing simple slabs, block laying and practices block wall construction.

Alternative credits: ½ Math/semester

8441 MASONRY 2

Grade Level 10-12. One semester. *Prerequisite: Completion of Masonry 1.* This course is a continuation of block construction and students are introduced to practice with brick construction including the building of corners, walls and columns. There is also instruction and practice in stucco stone application. The second semester includes additional concrete mixing and handling with use of additives and practice with various types of finishes.

Alternative credits: ½ Math/semester

8442 MASONRY 3

Grade Level 11-12. One semester. *Prerequisite: Completion of Masonry 2.* The student will continue to practice in block and brick construction with emphasis on improvement of speed and accuracy. Introduction is made to brick tile, slate and mica application.

Alternative credits: None.

8443 MASONRY 4

Grade Level 11-12. One semester. *Prerequisite: Completion of Masonry 3.* This course provides the student with practice in blueprint reading and take-offs, estimating material and layout work. Further practice is given in block construction. Students learn the use of fork-life, and welding equipment as related to masonry work. Emphasis is placed on the final polishing of skills to prepare the student for on-the-job training.

Alternative credits: None.

8250 SURVEYING I

Grade Level 11-12. Two semesters. *Prerequisite: Algebra with "C" or better. Geometry preferred.* This course is designed to provide useful experience in job preparation, especially pertinent to the needs of Alaska. Students acquire skills in surveying through training in the use of surveying instruments such as chains, transits, theodolites, levels and electronic measuring devices. The student will also receive instruction and practice in the use of office equipment such as calculators and computers. Time will be broken down to spend approximately ½ of instruction time in the field and ½ spent in office computations. The average person completing this course should be able to qualify as a rodperson or chainperson in a surveying party.

Alternative credits: ½ Math/semester

8255 SURVEYING II

Grade Level 11-12. Two semesters. *Prerequisite: Completion of Surveying I.* This course includes field application of surveying techniques and cooperative work experience in the community.

The Anchorage Community College may award up to 5 credits toward graduation to students who successfully complete the Surveying Program.

Sample Matrix: Math Competencies and Computer Technology

	MATH COMPETENCY DESCRIPTION	FORTRAN TIME	TYPE	DECALC TIME	TYPE	BASIC TIME	TYPE
4.1.1	SET THEORY-CONCEPTS & APPLICATION	3.51	E/R	1.00	I*	1.75	I* /R
4.1.2	PLACE VALUE-CONCEPTS & APPLICATION	1.34	R	5.51	I/E* R	5.79	E/R* E/R
4.1.3	WHOLE NUMBERS-ADDITION	1.75				0.30	E/R
4.1.4	WHOLE NUMBERS-SUBTRACTION						
4.1.5	WHOLE NUMBERS-MULTIPLICATION			0.08	R		
4.1.6	WHOLE NUMBERS-DIVISION			0.59	R	0.05	R
4.1.7	NUMBER THEORY-CONCEPTS & APPLICATION	3.13	I/E/R	0.50	E/R	0.50	I/E
4.1.8	INTEGERS-CONCEPTS & APPLICATION	4.23	E/R	1.00	E/R	2.17	E/R
4.1.9	FRACTIONS-CONCEPTS & APPLICATION	0.75	E/R				
4.1.10	DECIMALS-COMPUTE & APPLICATION	1.50	E/R	0.50	E/R	0.32	R
4.1.11	PERCENT, RATIO, PROPORTION-CONCEPTS & APPLICATION	1.67	E/R	1.75	E/R	0.67	E/R
4.1.12	EXPRESS RATIONALS IN MULTIPLE FORMS	1.57	I/E/R	1.70	E	0.35	I/E/R
4.1.13	RATIONALS-CONCEPTS & APPLICATION	9.00	I/E/R	28.83	I/E* E/R	15.22	I/E/R* E/R
4.1.14	REAL NUMBERS-CONCEPTS	2.00	E/R				
4.1.15	REAL NUMBERS-COMPUTE & APPLICATION	3.08	E/R	2.75	E/R	1.80	E/R
4.1.16	ABSOLUTE VALUE-CONCEPTS & APPLICATION	3.00	E/R	2.27	E/R	1.75	E
4.1.17	COMPLEX NUMBERS-CONCEPTS	0.75	E/R				
4.1.19	VECTORS-CONCEPTS & APPLICATION	0.33	I				
4.2.1	LINEAR MEASUREMENT					0.65	R
4.2.2	AREA MEASUREMENT	1.50	E			0.65	R
4.2.3	VOLUME & CAPACITY MEASUREMENT					0.15	R
4.2.5	TEMPERATURE	1.67	I/E	2.00	I/E		
4.2.6	TIME MEASUREMENT					0.10	R
4.2.7	MONEY MEASUREMENT	4.26	R	5.50	I/R	0.20	E
4.2.9	ANGLE MEASUREMENT						
4.3.1	USE BASIC GEOMETRIC SHAPES					0.67	E/R
4.3.4	CIRCLE CONCEPTS	0.67	E				
4.3.10	UNDERSTAND RECTANGULAR COORDINATE SYSTEM	11.75	I/E/R	0.17	R		
4.4.1	PERFORM OPERATIONS WITH MATH EXPRESSIONS	7.33	E/R			4.30	E/R

APPENDIX I

For a further description of the math competencies, please see the Anchorage School District Math Curriculum Booklet.

Sample Matrix: Math Competencies and Computer Technology

	MATH COMPETENCY DESCRIPTION	FORTRAN TIME	TYPE	DECALC TIME	TYPE	BASIC TIME	TYPE
4.4.2	NUMBER SENTENCE REPRESENTS ANALYSIS OF PROBLEM	9.08	E/R			3.83	E
4.4.3	SOLVE WORD PROBLEM	26.00	R	20.50	E/R	6.96	E/R
4.4.4	PROPERTIES & THEOREM OF EQUATIONS & THEIR ROOTS	0.50	E				
4.4.5	SOLVE EQUATIONS (QUAD, POLY, EXPO, LOG)	1.25	I/E/R				
4.4.8	SOLUTION OF SYSTEMS OF EQUATIONS						
4.4.9	CONCEPTS OF FUNCTIONS & RELATIONS	0.50	I/E				
4.4.10	COMPUTE, GRAPH FUNCTIONS & RELATIONS	0.50	I/E				
4.4.13	EXPONENTIAL FUNCTIONS	0.75	I/E				
4.4.14	LOGARITHMS-CONCEPT	0.25	I/E				
4.4.16	TRIGONOMETRIC (CIRCULAR) FUNCTIONS	0.25	I/E				
4.4.18	SOLVE TRIG EQUATIONS	0.17	I				
4.4.24	LIMITS OF SEQUENCES AND SERIES	0.17	E				
4.4.25	APPLY LIMITS TO WORD PROBLEMS	0.25	I				
4.5.2	INTERPRET TABLE OR GRAPH						
4.6.1	USE COMMON CALCULATING DEVICES						
4.6.2	IMPACT OF COMPUTING DEVICES ON SOCIETY			11.00	I/E/R*	11.00	I/E/R*
4.6.3	BASIC COMPUTER CONCEPTS	0.24	I	10.00	I/E*	10.00	I/E*
4.6.4	BASIC COMPUTER APPLICATIONS			3.50	I/E*	3.50	E*
4.6.5	FLOWCHARTING	2.07	I/E/R	2.00	I	16.50	I* I/E/R
4.6.6	COMPUTER LANGUAGES-CONCEPTS	78.66	I	4.00	I*	40.16	I* E
	TOTAL TIME	175.43		105.15		129.34	

Above is a matrix of the Anchorage School District Math Competencies and the various modules of study which compose the course Computer Technology taught at the Martin Luther King Career Center.

For each module of study an approximate time estimate has been made. Time estimates have been made according to the following:

5 min.	.08
10 min.	.17
15 min.	.25
20 min.	.33
30 min.	.50
40 min.	.66
45 min.	.75
60 min.	1.0

The instruction code is as follows:

I = introduce
E = expand
R = reinforce/apply

(Please note that any code with an * indicates that a portion of that competency was included in the Fundamentals unit of study).